

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A content production system, comprising:

an ingest system for receiving content in an initial format and reformatting the received content into content having a first format with a lower resolution, content having a second format with a higher resolution, and content having a third format with a lowest resolution;

storage for storing the lower resolution content and lowest resolution content in a fast access storage and higher resolution content in a high capacity storage, wherein the fast access storage is accessible more quickly than the high capacity storage;

an edit station for selecting a portion of content from the lower resolution content using a browser; and

retrieval apparatus for receiving a description of the selected portion from the edit station and retrieving a portion of content from the higher resolution content corresponding to the selected portion

wherein timecodes identifying corresponding portions of the lower resolution and higher resolution content are stored with the lower resolution and higher resolution content, respectively,

wherein the timecodes of the lower resolution content and the higher resolution content are analyzed for time synchronization of the lower resolution content with the higher resolution content, the time synchronization performed by calibrating for an offset

of time between the lower resolution content and the higher resolution content by
utilizing a frame number and a timecode associated with a current frame.

2. (Original) The system of claim 1, wherein the first format comprises low resolution digitized video content.
3. (Original) The system of claim 1, wherein the second format comprises high resolution digitized video content.
4. (Original) The system of claim 1, wherein the first format comprises MPEG1.
5. (Original) The system of claim 1, wherein the second format comprises MPEG2.
6. (Previously Presented) The system of claim 1, wherein the ingest system is web-based.
7. (Original) The system of claim 1, wherein the edit station is web-based.
8. (Original) The system of claim 1, wherein a portion of the lower resolution content is stored in fast-access storage during editing.
9. (Original) The system of claim 8, wherein the fast-access storage consists of at least one of: disk storage, optical storage, and memory.

10. (Original) The system of claim 1, wherein the higher resolution content is stored on tape storage.

11. (Original) The system of claim 1, wherein the initial format is analog.

12. (Previously Presented) The system of claim 1, further comprising an apparatus for adding metadata to the stored content.

13. (Original) The system of claim 12, wherein the metadata consists of at least one of: user input, legacy data, a thumbnail, a storyboard, transcription information, speech-to-text processing of an audio stream associated with the input content, and speech-to-text annotation.

14. (Canceled)

15. (Currently Amended) The system of claim 1-14, wherein timecodes associated with the selected portions of the lower resolution content are used by the retrieval apparatus to retrieve the corresponding portions of higher resolution content.

16. (Currently Amended) The system of claim 1-14, wherein the ingest system superimposes timecodes on individual image frames of the lower resolution content so that the timecodes may be read at the edit station after storage.

17. (Original) The system of claim 1, wherein the edit station further comprises software for searching the lower resolution content based on user-specified criteria.

18. (Original) The system of claim 1, wherein the edit station further comprises an interface for viewing the lower resolution content and selecting desired portions therefrom.

19. (Original) The system of claim 1, wherein the edit station further comprises software for creating a list of selected portions of lower resolution content.

20. (Original) The system of claim 19, wherein the edit station further comprises software for modifying the list.

21. (Original) The system of claim 19, wherein the edit station provides the list to the retrieval apparatus.

22. (Currently Amended) A content editing system, comprising:
storage storing content in a low resolution format and content in a lowest resolution format in a fast access storage and storing content in a high resolution format in a high capacity storage, wherein the fast access storage is accessible more quickly than the high capacity storage;
a server hosting a content-editing application enabling selection of a portion of the low resolution content;

a plurality of clients in communication with the server, each client enabled to run the content-editing application to select the portion of the low resolution content using a browser and from the selected portion, create an edit list for use in retrieving a corresponding portion of the high resolution content

wherein timecodes identifying corresponding portions of the low resolution and high resolution content are stored with the low resolution and high resolution content, respectively.

wherein the timecodes of the low resolution content and the high resolution content are analyzed for time synchronization of the low resolution content with the high resolution content, the time synchronization performed by calibrating for an offset of time between the low resolution content and the high resolution content by utilizing a frame number and timecode associated with a current frame.

23. (Original) The system of claim 22, wherein the edit list is sharable with others of the plurality of clients through the server.

24. (Currently Amended) A content editing software application, comprising:
server software enabling selection of a portion of low resolution content and lowest resolution content from a first stored file in a fast access storage accessible to a server;
client software for selecting the portion of the low resolution content using a browser and from the selected portion, creating an edit list for use in retrieving corresponding high resolution

content from a second stored file in a high capacity storage accessible to the server, wherein the fast access storage is accessible more quickly than the high capacity storage

and wherein timecodes identifying corresponding portions of the low resolution and high resolution content are stored with the low resolution and high resolution content, respectively.

wherein the timecodes of the low resolution content and the high resolution content are analyzed for time synchronization of the low resolution content with the high resolution content, the time synchronization performed by calibrating for an offset of time between the low resolution content and the high resolution content by utilizing a frame number and timecode associated with a current frame.

25. (Original) The application of claim 24, wherein the edit list is sharable with other clients through the server.

26. (Currently Amended) A method for producing content, comprising the steps of:
receiving content in an initial format and reformatting the received content into content having a first format with a lower resolution, content having a second format with a higher resolution, and content having a third format with a lowest resolution;

storing the lower resolution content and lowest resolution content in a fast access storage and the higher resolution content in a high capacity storage, wherein the fast access storage is accessible more quickly than the high capacity storage;

selecting a portion of content from the lower resolution content using a browser; and

receiving a description of the selected portion and retrieving a portion of content from the higher resolution content corresponding to the selected portion

wherein timecodes identifying corresponding portions of the lower resolution and higher resolution content are stored with the lower resolution and higher resolution content, respectively,

wherein the timecodes of the lower resolution content and the higher resolution content are analyzed for time synchronization of the lower resolution content with the higher resolution content, the time synchronization performed by calibrating for an offset of time between the lower resolution content and the higher resolution content by utilizing a frame number and timecode associated with a current frame.

27. (Original) The method of claim 26, wherein the first format comprises low resolution digitized video content.

28. (Original) The method of claim 26, wherein the second format comprises high resolution digitized video content.

29. (Original) The method of claim 26, wherein the first format comprises MPEG1.

30. (Original) The method of claim 26, wherein the second format comprises MPEG2.

31. (Previously Presented) The method of claim 26, wherein the ingest system is web-based.

32. (Original) The method of claim 26, wherein the method is web-based.

33. (Original) The method of claim 26, wherein a portion of the lower resolution content is stored in fast-access storage during editing.

34. (Original) The method of claim 33, wherein the fast-access storage consists of at least one of: disk storage, optical storage, and memory.

35. (Original) The method of claim 26, wherein the higher resolution content is stored on tape storage.

36. (Original) The method of claim 26, wherein the initial format is analog.

37. (Original) The method of claim 26, further comprising the step of adding metadata to the stored content.

38. (Original) The method of claim 37, wherein the metadata consists of at least one of: user input, legacy data, a thumbnail, a storyboard, transcription information, speech-to-text processing of an audio stream associated with the input content, and speech-to-text annotation.

39. (canceled).

40. (currently amended): The method of claim 26-39, wherein timecodes associated with the selected portions of the lower resolution content are used to retrieve the corresponding portions of higher resolution content.

41. (currently amended): The method of claim 26-39, wherein timecodes are superimposed on individual image frames of the lower resolution content so that the timecodes may be read after storage.

42. (Original) The method of claim 26, further comprising the step of searching the lower resolution content based on user-specified criteria.

43. (Original) The method of claim 26, further comprising the step of viewing the lower resolution content and selecting desired portions therefrom.

44. (Original) The method of claim 26, further comprising the step of creating a list of selected portions of lower resolution content.

45. (Original) The method of claim 44, further comprising the step of modifying the list.

46. (Original) The method of claim 44, wherein the description further comprises the list.

47. (Currently Amended) A content editing method, comprising the steps of:

storing content in a low resolution format and content in a lowest resolution format in a fast access storage and storing content in a high resolution format in a high capacity storage, wherein the fast access storage is accessible more quickly than the high capacity storage;

enabling selection of a portion of the low resolution content;

selecting the portion of the low resolution content using a browser and from the selected portion, creating an edit list for use in retrieving a corresponding portion of the high resolution content

wherein timecodes identifying corresponding portions of the low resolution and high resolution content are stored with the low resolution and high resolution content, respectively.

wherein the timecodes of the low resolution content and the high resolution content are analyzed for time synchronization of the low resolution content with the high resolution content, the time synchronization performed by calibrating for an offset of time between the low resolution content and the high resolution content by utilizing a frame number and timecode associated with a current frame.

48. (Original) The method of claim 47, wherein the edit list is sharable by a plurality of users.

49. (Currently Amended) A content editing method, comprising the steps of:
selecting a portion of lowest resolution content and low resolution content from a first stored file in a fast access storage using a browser and from the selected portion, creating an edit list for use in retrieving corresponding high resolution content from a second stored file in a high capacity storage, wherein the fast access storage is accessible more quickly than the high capacity storage

and wherein timecodes identifying corresponding portions of the low resolution and high resolution content are stored with the low resolution and high resolution content, respectively.

wherein the timecodes of the low resolution content and the high resolution content are analyzed for time synchronization of the low resolution content with the high resolution content, the time synchronization performed by calibrating for an offset of time between the low resolution content and the high resolution content by utilizing a frame number and timecode associated with a current frame.

50. (Original) The method of claim 49, wherein the edit list is sharable by a plurality of users.

51. (Currently Amended) A program product containing instructions executable by a computer, the instructions embodying a method for producing content, comprising the steps of:

receiving content in an initial format and reformatting the received content into content having a first format with a lower resolution, content having a second format with a higher resolution, and content having a third format with a lowest resolution;

storing the lower resolution content and lowest resolution content in a fast access storage and the higher resolution content in a high capacity storage, wherein the fast access storage is accessible more quickly than the high capacity storage;

selecting a portion of content from the lower resolution content using a browser; and

receiving a description of the selected portion and retrieving a portion of content from the higher resolution content corresponding to the selected portion

wherein timecodes identifying corresponding portions of the lower resolution and higher resolution content are stored with the lower resolution and higher resolution content, respectively,

wherein the timecodes of the lower resolution content and the higher resolution content are analyzed for time synchronization of the lower resolution content with the higher resolution content, the time synchronization performed by calibrating for an offset of time between the lower resolution content and the higher resolution content by utilizing a frame number and timecode associated with a current frame.

52. (Previously Presented) The program product of claim 51, wherein the first format comprises low resolution digitized video content.

53. (Previously Presented) The program product of claim 51, wherein the second format comprises high resolution digitized video content.

54. (Previously Presented) The program product of claim 51, wherein the first format comprises MPEG1.

55. (Previously Presented) The program product of claim 51, wherein the second format comprises MPEG2.

56. (Previously Presented) The program product of claim 51, wherein the ingest system is web-based.

57. (Previously Presented) The program product of claim 51, wherein the method is web-based.

58. (Previously Presented) The program product of claim 51, wherein a portion of the lower resolution content is stored in fast-access storage during editing.

59. (Previously Presented) The program product of claim 58, wherein the fast-access storage consists of at least one of: disk storage, optical storage, and memory.

60. (Previously Presented) The program product of claim 51, wherein the higher resolution content is stored on tape storage.

61. (Previously Presented) The program product of claim 51, wherein the initial format is analog.

62. (Previously Presented) The program product of claim 51, further comprising the step of adding metadata to the stored content.

63. (Previously Presented) The program product of claim 62, wherein the metadata consists of at least one of: user input, legacy data, a thumbnail, a storyboard, transcription information, speech-to-text processing of an audio stream associated with the input content, and speech-to-text annotation.

64. (canceled).

65. (currently amended): The program product of claim 64~~51~~, wherein timecodes associated with the selected portions of the lower resolution content are used to retrieve the corresponding portions of higher resolution content.

66. (currently amended): The program product of claim ~~64~~51, wherein timecodes are superimposed on individual image frames of the lower resolution content so that the timecodes may be read after storage.

67. (Previously Presented) The program product of claim 51, further comprising the step of searching the lower resolution content based on user-specified criteria.

68. (Previously Presented) The program product of claim 51, further comprising the step of viewing the lower resolution content and selecting desired portions therefrom.

69. (Previously Presented) The program product of claim 51, further comprising the step of creating a list of selected portions of lower resolution content.

70. (Previously Presented) The program product of claim 69, further comprising the step of modifying the list.

71. (Previously Presented) The program product of claim 69, wherein the description further comprises the list.

72. (Currently Amended) A program product containing instructions executable by a computer, the instructions embodying a content editing method, comprising:

storing content in a low resolution format and content in a lowest resolution format in a fast access storage and storing content in a high resolution format in a high capacity storage, wherein the fast access storage is accessible more quickly than the high capacity storage; enabling selection of a portion of the low resolution content; and selecting the portion of the low resolution content using a browser and from the selected portion, creating an edit list for use in retrieving corresponding portions of the high resolution content

wherein timecodes identifying corresponding portions of the low resolution and high resolution content are stored with the low resolution and high resolution content, respectively.

wherein the timecodes of the low resolution content and the high resolution content are analyzed for time synchronization of the low resolution content with the high resolution content, the time synchronization performed by calibrating for an offset of time between the low resolution content and the high resolution content by utilizing a frame number and timecode associated with a current frame.

73. (Previously Presented) The program product of claim 72, wherein the edit list is sharable by a plurality of users.

74. (Currently Amended) A program product containing instructions executable by a computer, the instructions embodying a content editing method, comprising:

selecting a portion of lowest resolution content and low resolution content from a first stored file in a fast access storage using a browser and from the selected portion, creating an edit list for use in retrieving corresponding high resolution content from a second stored file in a high capacity storage, wherein the fast access storage is accessible more quickly than the high capacity storage

and wherein timecodes identifying corresponding portions of the low resolution and high resolution content are stored with the low resolution and high resolution content, respectively,

wherein the timecodes of the low resolution content and the high resolution content are analyzed for time synchronization of the low resolution content with the high resolution content, the time synchronization performed by calibrating for an offset of time between the low resolution content and the high resolution content by utilizing a frame number and timecode associated with a current frame.

75. (Previously Presented) The program product of claim 74, wherein the edit list is sharable by a plurality of users.

76. (Currently Amended) A content production system, comprising:
an ingest system for receiving content in an initial format and reformatting the received content into three content formats, each having a different resolution;

storage for storing the content of different resolutions in a fast access storage and a high capacity storage, wherein the fast access storage is accessible more quickly than the high capacity storage;

an edit station for selecting a portion of content from one of the content formats having a middle resolution of the three or more content formats stored in the fast access storage using a browser; and

retrieval apparatus for receiving a description of the selected portion from the edit station and retrieving a portion of content from another of the content formats stored in the high capacity storage corresponding to the selected portion

wherein timecodes identifying corresponding portions of the selected content having one resolution and content having another resolution are stored with the selected content having one resolution and content having another resolution, respectively.

wherein the timecodes of the selected content having one resolution and the content having another resolution are analyzed for time synchronization of the selected content having one resolution with the content having another resolution, the time synchronization performed by calibrating for an offset of time between the selected content having one resolution and the content having another resolution by utilizing a frame number and timecode associated with a current frame.

77. (Currently Amended) A method for producing content, comprising the steps of:
receiving content in an initial format and reformatting the received content into three content formats, each having a different resolution;

storing the content of different resolutions in a fast access storage and a high capacity storage, wherein the fast access storage is accessible more quickly than the high capacity storage;
selecting a portion of content from one of the content formats having a middle resolution of the three or more content formats stored in the fast access storage using a browser; and
receiving a description of the selected portion of content and retrieving a portion of content from another of the content formats stored in the high capacity storage corresponding to the selected portion

wherein timecodes identifying corresponding portions of the selected content having one resolution and content having another resolution are stored with the selected content having one resolution and content having another resolution, respectively,

wherein the timecodes of the selected content having one resolution and the content having another resolution are analyzed for time synchronization of the selected content having one resolution with the content having another resolution, the time synchronization performed by calibrating for an offset of time between the selected content having one resolution and the content having another resolution by utilizing a frame number and timecode associated with a current frame.

78. (Currently Amended) A program product containing instructions executable by a computer, the instructions embodying a method for producing content, comprising the steps of:

receiving content in an initial format and reformatting the received content into three content formats, each having a different resolution;

storing the content of different resolutions in a fast access storage and a high capacity storage, wherein the fast access storage is accessible more quickly than the high capacity storage;
selecting a portion of content from one of the content formats having a middle resolution of the three or more content formats stored in the fast access storage using a browser; and
receiving a description of the selected portion of content and retrieving a portion of content from another of the content formats stored in the high capacity storage corresponding to the selected portion

wherein timecodes identifying corresponding portions of the selected content having one resolution and content having another resolution are stored with the selected content having one resolution and content having another resolution, respectively,

wherein the timecodes of the selected content having one resolution and the content having another resolution are analyzed for time synchronization of the selected content having one resolution with the content having another resolution, the time synchronization performed by calibrating for an offset of time between the selected content having one resolution and the content having another resolution by utilizing a frame number and timecode associated with a current frame.

79. (Previously Presented) The system of claim 1, wherein the ingest system performs a verification process to determine correspondence between the content having a first format and the content having a second format.

80. (Previously Presented) The method of claim 26, further comprising the step of performing a verification process to determine correspondence between the content having a first format and the content having a second format.

81. (Previously Presented) The program product of claim 51, further comprising the step of performing a verification process to determine correspondence between the content having a first format and the content having a second format.

82. (Currently Amended) The system of claim 1, wherein the retrieval apparatus is also for converting the portion of content from the higher resolution into content having a fourth format for final editing or broadcast.

83. (Currently Amended) The method of claim 26, further comprising the step of converting the portion of content from the higher resolution into content having a fourth format for final editing or broadcast.

84. (Currently Amended) The program product of claim 51, further comprising the step of converting the portion of content from the higher resolution into content having a fourth format for final editing or broadcast.

85. (Previously Presented) The system of claim 22, wherein:

the server hosting a content-editing application also enables access and viewing of the low resolution content; and

each of the plurality of clients are enabled to run the content-editing application to search and view the low resolution content.

86. (Previously Presented) The system of claim 1, wherein the fast access storage is a digital library with media streaming capability.

87. (Previously Presented) The content editing system of claim 22, wherein the fast access storage is a digital library with media streaming capability.

88. (Previously Presented) The content editing software application of claim 24, wherein the fast access storage is a digital library with media streaming capability.

89. (Previously Presented) The method for producing content of claim 26, wherein the fast access storage is a digital library with media streaming capability.

90. (Previously Presented) The content editing method of claim 47, wherein the fast access storage is a digital library with media streaming capability.

91. (Previously Presented) The content editing method of claim 49, wherein the fast access storage is a digital library with media streaming capability.

92. (Previously Presented) The program product of claim 51, wherein the fast access storage is a digital library with media streaming capability.

93. (Previously Presented) The program product of claim 72, wherein the fast access storage is a digital library with media streaming capability.

94. (Previously Presented) The program product of claim 74, wherein the fast access storage is a digital library with media streaming capability.

95. (Previously Presented) The content production system of claim 76, wherein the fast access storage is a digital library with media streaming capability.

96. (Previously Presented) The method for producing content of claim 77, wherein the fast access storage is a digital library with media streaming capability.

97. (Previously Presented) The program product of claim 78, wherein the fast access storage is a digital library with media streaming capability.

98. (Previously Presented) The system of claim 1, wherein the third format comprises thumbnail representations of the content having a first format, and is used as metadata of the first format.

99. (Previously Presented) The method of claim 26, wherein the third format comprises thumbnail representations of the content having a first format, and is used as metadata of the first format.

100. (Previously Presented) The program product of claim 51, wherein the third format comprises thumbnail representations of the content having a first format, and is used as metadata of the first format.

101. (Previously Presented) The system of claim 1, wherein the edit station is for searching the content having the first format, reviewing the content of the third format as metadata of the content having the first format, and preparing a storyboard using the content having the third format.

102. (Previously Presented) The method of claim 26, wherein the selecting of the portion of content from the lower resolution comprises searching the content having the first format, reviewing the content of the third format as metadata of the content having the first format, and preparing a storyboard using the content having the third format.

103. (Previously Presented) The program product of claim 51, wherein the selecting of the portion of content from the lower resolution comprises searching the content having the first

format, reviewing the content of the third format as metadata of the content having the first format, and preparing a storyboard using the content having the third format.

104. (Canceled)

105. (new): The system of claim 1, wherein the offset in time between the lower resolution content and the higher resolution content is calibrated by comparing the frame number and the timecode associated with the current frame of the low resolution content with a starting frame number and a starting timecode of the low resolution content.